TECHNICAL REQUIREMENTS

1.0 REQUIREMENTS

1.1 Background

The Lowell Regional Water Utility (LRWU) operates and maintains a 30 MGD water treatment facility that services the City of Lowell and portions of several surrounding communities. Water is pumped by the Raw Water Pumping Station from the Merrimack River to the Water Treatment Facility, where it is treated and pumped to the distribution system to meet system demand. The distribution system consists of approximately 204 miles of water mains with diameters ranging from 6 inches to 36 inches. The distribution system includes four water storage tanks and six pumping stations. The water distribution system consists of three main pressure zones.

1.2 Recent Projects

Recent improvements to the water system infrastructure include a complete upgrade of the treatment facility with automation through a new SCADA system, replacement of raw and finished water pumps, construction of two new storage tanks and two new booster pumping stations, replacement of the City's larger diameter water meters, installation of a fixed network automatic meter reading system and replacement of approximately ten miles of water mains throughout the distribution system. Each of these projects was funded by the State Revolving Fund loan program.

1.3 Scope of Services

The LRWU is requesting submittals of qualification statements from engineering firms for engineering services relating to water treatment and distribution system improvements. Engineering services are to include master planning, design, bidding support, funding administration, operations support, construction administration, resident inspection, SCADA system support, and general as-needed regulatory compliance assistance. Funding will be provided for portions of the work through the State Revolving Fund (SRF) loan program.

Major projects include engineering design and construction phase engineering services for 24- and 36-inch water main and valve installation, replacement of residential water meters and water treatment plant and pumping station improvements. In addition, engineering services will include providing SCADA system implementation and support services, operational support, process optimization support, master planning, regulatory compliance assistance and other services as determined by the City of Lowell.

The selected firm will demonstrate expertise in addressing all of the requirements set forth in this RFQ.

1.4 Duration of Contract and Delivery of Products Requested

The required tasks shall be completed and delivered to the Lowell Regional Water Utility as agreed upon during negotiation. The LRWU will establish project task priorities. Certain project tasks may be delayed or deleted and additional tasks may be assigned to the selected engineer.

2.0 RESPONSE REQUIREMENTS

2.1 Qualifications Statement Requirements

To be considered for the work, the prospective engineer must submit a Statement of Qualifications containing the following information:

a) Engineer's demonstrated ability with obtaining funds (State or Federal) for municipal projects and managing state or federally funded projects.

b) Engineer's demonstrated ability in preparing construction contract documents and providing construction services for municipal water system projects in Massachusetts.

c) Engineer's demonstrated ability in designing and providing SCADA system services for municipal water systems.

d) Engineer’s demonstrated ability to minimize project costs and construction change orders.

e) Engineer’s demonstrated ability in providing engineering services to Massachusetts cities similar to Lowell.

f) Engineer’s demonstrated ability to assist municipalities in optimizing treatment techniques and providing operational support.

g) Engineer’s demonstrated ability to execute all primary engineering services in offices located within 50 miles of the Lowell Regional Water Utility, 815 Pawtucket Boulevard, Lowell, MA.

The submittal must be concise, complete and accurate, without unnecessary elaboration. Supplying information not directly pertaining to the required qualifications response will be viewed unfavorably. The Qualifications Statement should include a cover letter and the following sections with the maximum number of pages as indicated.

- Executive Summary (two pages)
- Engineer's General Experience (two pages)
- Project Related Qualifications (ten pages)
- Project Team Qualifications (three pages, excluding resumes)
- Demonstrated Ability to Begin Work Immediately and Meet Project Schedule (two pages)

3.0 EVALUATION OF QUALIFICATIONS

3.1 Comparative Criteria

The relative merits of each submittal will be evaluated using the following Comparative Criteria.

a. Demonstrated capability to apply for, secure and administer State Revolving Fund (SRF) loans and other funds for municipal projects and to meet all funding requirements and milestones.

   i. "Highly advantageous" rating for having satisfactorily sought funding for and completed at least five (5) SRF funded projects within the last five years.

   ii. "Advantageous" rating for having satisfactorily sought funding for and completed at least three (3) SRF funded projects within the last five years.

   iii. Not advantageous" rating for firms with less experience than item ii above.

b. Demonstrated capability to prepare construction contract documents and provide construction services for municipal water system projects in Massachusetts.

   i. "Highly advantageous" rating for having satisfactorily completed design and construction services for at least ten (10) municipal water system projects in Massachusetts within the last five years.

   ii. "Advantageous" rating for having satisfactorily completed design and construction services for at least five (5) municipal water system projects in Massachusetts within the last five years.

   iii. "Not advantageous" rating for firms with less experience than item ii above.

c. Demonstrated capability to successfully complete design and construction oversight, and to provide SCADA system implementation and on-call SCADA services to municipal water systems.

   i. "Highly advantageous" rating for firms that have satisfactorily completed at least five (5) SCADA system design and implementation projects within the last five years AND have a dedicated SCADA system service staff of at least five (5) full-time employees.

   ii. "Advantageous" rating for firms that have satisfactorily completed at least three (3) SCADA system design and implementation projects within the last five years AND have a dedicated SCADA system service staff of at least three (3) full time employees.

   iii. "Not advantageous" rating for firms with less experience or qualifications than item ii above.

d. Demonstrated capability to minimize project costs and construction change orders

   i. "Highly advantageous" rating for having satisfactorily completed design and construction services for at least five (5) similar municipal projects in Massachusetts within the last five years with total change orders of less than 2% of total construction cost. (References for each listed project must be provided).

   ii. "Advantageous" rating for having satisfactorily completed design and construction services for at least five (5) similar municipal projects in Massachusetts within the last five years with total change orders of less than 5% of total construction cost. (References for each listed project must be provided).

   iii. "Not advantageous" rating for firms with less experience or a higher change order percentage than item ii above. (References for each listed project must be provided).

e. Demonstrated capability to provide engineering services to Massachusetts cities similar to Lowell.

   i. "Highly advantageous" rating for having satisfactorily performed engineering services for at least five (5) similar municipal water system projects in Massachusetts within the last five years.

   ii. "Advantageous" rating for having satisfactorily performed engineering services for at least three (3) similar municipal water system projects in Massachusetts within the last five years.

   iii. "Not advantageous" rating for firms with less experience than item ii above.

f. Demonstrated capability to assist municipalities in optimizing treatment and providing operational support.

   i. "Highly advantageous" rating for having provided optimization and operational support services to at least five (5) municipal water utilities within the last five years AND currently employ at least five (5) MA Grade 4T/4D licensed water treatment operators.

   ii. "Advantageous" rating for having provided optimization and operational support services to at least three (3) municipal water utilities within the last five years AND currently employ at least three (3) MA Grade 4T/4D licensed water treatment operators.

   iii. "Not advantageous" rating for firms with less experience or qualifications than item ii above.

g. Demonstrated capability to conduct all primary engineering services in offices in proximity to the Lowell Regional Water Utility, 815 Pawtucket Boulevard, Lowell, MA.

   i. "Highly advantageous" rating for conducting all primary engineering services within 30 miles of the Lowell Regional Water Utility.

ii. "Advantageous" rating for conducting all primary engineering services within 50 miles of the Lowell Regional Water Utility.

iii. "Not advantageous" rating for firms not within the proximity indicated in item ii above.

4.0 QUALIFICATIONS REVIEW AND FINAL SELECTION

4.1 Inquiries/Information

The Lowell Regional Water Utility Executive Director, Daniel Lahiff will serve as the point of contact between prospective Engineers and the Project Selection Committee for all inquiries.

4.2 Project Selection Committee

The LRWU will select a Project Selection Committee to evaluate and rate the submitted Qualifications Statements. This committee will consist of LRWU staff and other City employees.

4.3 Rejection of Qualifications Statements

LRWU may immediately disqualify any Engineer it determines to be non-responsive for reasons including but not limited to:

- Non-responsive to any material requirements of this RFQ
- Qualifications statement received after the submission deadline
- Statements that misrepresent goods or services or provide demonstrably false information.

4.4 Clarification of Qualifications

The Project Selection Committee will make its determination of qualifications solely upon clear and unambiguous qualifications submittals.

4.5 Return of Qualifications Statement

LRWU shall retain for its records any and all materials submitted by prospective engineers in response to this RFQ.

4.6 Interviews

LRWU reserves the right to conduct or waive interviews, and to select finalists from the pool of applicants based upon the qualifications of each engineer. If interviews are required, evaluation of the prospective engineers will be based upon the content and quality of the engineer's presentation. LRWU may ask questions at the end of the engineer's presentation. The parties who make presentations must be the same as those named as assigned to the project in the proposal. Prospective engineers will be given ample notification to adequately prepare for a presentation and interview.

4.7 Selection Recommendation

The Project Selection Committee will select an engineer for this project. The selection will be based on the qualifications outlined above. The Project Selection Committee shall determine the most advantageous proposal from a responsible and responsive engineer, taking into consideration only the qualifications and the evaluation criteria set forth in this RFQ.

4.8 Notification of Selection

A written Notice of Selection will be sent to the engineer approved by the Project Selection Committee. The selected engineer will proceed to negotiate fees and finalize project scope and schedule with the LRWU. Award of the contract will be based on successful scope and fee negotiations with the selected engineer. If the negotiations are unsuccessful, LRWU reserves the option to open negotiations with the second most qualified engineer. A letter will be sent to each engineer who is not approved for award, including those engineers disqualified during the evaluation process. Said process will be open for all engineers to review at its conclusion.